

ABSTRACT OF THE DISCLOSURE

The invention provides a method for converting resolution of image data which is capable of making a high-resolution image data without incompatibility by improving a viewing angle range when displaying low-resolution image data after resolution conversion. The image display device can be mounted in a mobile phone or PDA, processes and displays image data transmitted from the outside. Specifically, resolution-converted image data with an increased resolution is generated by creating a plurality of pixels from each pixel constituting the original acquired image data and increasing the number of the pixels. This is achieved by doubling each pixel of the original image data in the horizontal and vertical directions to make it four pixels. For the resolution-converted image data obtained by doing so, a viewing angle range adjustment is carried out. Specifically, adjacent pixels in a vertical direction of the resolution-converted image data are set so that each grayscale value of the pixels is different from each other. In this regard, in the resolution-converted image data, bright pixels and dark pixels are arranged adjacent in the vertical direction and thus a vertical viewing angle range is enlarged. Therefore, the resolution-converted image data is displayed on the display unit. In case that resolution conversion step is performed with respect to the original image data as mentioned above, the image data after the conversion can have a wide viewing angle range.